

I. EXECUTIVE SUMMARY

This report summarizes the state of cancer in South Dakota and includes cancer incidence and mortality data. The data will enable the many organizations working with cancer prevention and control to identify public health problems, target goals for cancer control, and to inform citizens and health care professionals about risks, early detection, and treatment.

Incidence 2003

- 3,814 South Dakotans were diagnosed with invasive, reportable cases of cancer, which excludes the less life-threatening cancers such as *in situ* cancers (except *in situ* bladders) and the common skin cancers.
- Each day approximately 11 South Dakotans are diagnosed with cancer.
- The top five cancer sites: prostate, female breast, lung and bronchus, colorectal and bladder accounted for 62% of all cancer cases.
- Prostate cancer was the most common reportable malignancy reported with 677 cases, 18% of all cases.
- Breast cancer was the second most common reportable malignancy with 642 cases among women and 5 among men accounting for 14% of all cases.
- Lung and bronchus cancers were the third most common malignancy with 496 cases, 13% of all cases.
- Colon and rectum cancers were the third most common reportable cancer with 480 cases, 12% of all case
- Urinary bladder cancers were the fifth most common malignancy with 200 cases, 5% of all cases.
- More than half, 52%, of all new cancers were diagnosed in males and 48 % were in females, two % more than in 2002.
- Males had an age-adjusted incidence rate of 558.9 cases per 100,000 males, 38% higher than females with an age-adjusted rate of 425.8 cases per 100,000 females.
- Whites accounted for 95% of cases with 3,814 cases whereas American Indians were 4% with 154 cases and other or unknown races were 1%.
- The South Dakota all sites combined incidence rate for 2003 was 481.0 cases, significantly higher than the U.S. SEER rate of cancers 452.6 cases per 100,000 persons.
- The American Indian age-adjusted incidence rate was 506.5, which is 5% higher than the rate among whites, 481 cases per 100,000 persons but it is not statistically significant when compared to the South Dakota rate.

Mortality 2003

- Overall, cancer was the second leading cause of death in South Dakota.
- Cancer surpassed heart disease as the leading cause of death for persons under 85 years old.
- 1,636 South Dakotans died from cancer.
- Each day 4 South Dakotans die from cancer.
- The top five cancers sites causing death accounted for 55% of all cancer deaths.
- Lung and bronchus cancers were the first leading cause of cancer deaths with 25% making it the cause of 1 in 4 deaths due to cancer.
- Colorectal cancer was the second leading cause of cancer deaths with 179 deaths, 11% of all cancer deaths.

- Prostate cancer was the third leading cause of death with 110 deaths, 7% of all cancer deaths.
- Breast cancer was the fourth leading cause of death with 109 deaths, 7% of all cancer deaths and all women.
- Pancreatic cancer was the fifth leading cause of death with 6% of all cancer deaths.
- Just over half, 51%, of all cancer deaths were males and 49% were females.
- Males had an age-adjusted death rate of 220 deaths per 100,000 males, 40% higher than females with an age-adjusted rate of 157 deaths per 100,000 females.
- Whites accounted for 95% of deaths with 1,489 deaths whereas American Indians were 4.5% with 70 deaths.
- South Dakota's death rate for 2003 was 188.9 deaths, not different from the U.S. SEER rate of 190.1 deaths per 100,000 persons.
- The American Indian age-adjusted death 244.2, which is 30% higher than the rate among whites, 187.2 deaths per 100,000 persons

Trends 1999-2003

- South Dakota's all sites combined cancer death rates fell by - 4.5% change (PC) from 1999- 2003 with a PC of - 4.8 for males and - 6.1 for females.
- The death rate fell by an annual percent change (APC) of -1.2% during 1999-2003 with an APC of 2.0 for males and -0.1 for females.
- The PC for whites was - 4.6 and - 4.2 for American Indians.
- The APC was -1.5 for whites and 0.5 for American Indians

Mortality/Incidence ratio (M/I) 2003

- The mortality to incidence ratio (M/I) or case fatality overall was 0.4 for both sexes, 0.4 for males and 0.4 females.
- Liver and intra-hepatic bile duct cancers were by far the most lethal cancer with a 1.1 M/I.

Years of potential life lost (YPLL) 2003

- The cancer age-adjusted YPLL for South Dakota for 2003 was 1,464 years/100,000 persons, the highest of all causes of deaths in South Dakota.
- American Indians had the highest age-adjusted rates for YPLL with 1,684 years while whites were 1,472 years per 100,000 persons.
- The cancer YPLL was 11,342 years, the highest for all causes of deaths in 2003.
- Lung and bronchus cancers had the highest (not age-adjusted) YPLL with 2,118 years for whites and 88.5 years for American Indians in 2003.

Average Years of Life Lost (AYLL) 2003

- By rank, after childhood cancers, AYLL data shows that American Indians are dying at a much younger age with 17 AYLL compared to whites with 14 AYLL.
- After childhood cancers, Hodgkins lymphoma had the leading AYLL for 2003 occurring among whites while cervical cancer had the leading AYLL among American Indians with 30.5 years.